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Entry: Anthropology in Public Health

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Public health is often described as having the population or community as its patient, in contrast to the individual-level focus of clinical medicine. This focus on community creates a natural foundation for partnership between public health and anthropology, which takes as its primary focus the study of people in groups and especially in local communities. Anthropology has four major subfields: cultural anthropology, physical or biological anthropology, archeology, and linguistics. Cross-cutting the subfields are a number of subdisciplinary foci that have much to contribute to the achievement of public health objectives. The most important for public health is *medical anthropology*, a focus that first emerged as a coherent subdiscipline in the 1950s and has rapidly grown to become one of the largest areas of research and practice within anthropology. The richness of this subdiscipline is apparent in the range of theoretical perspectives encompassed by it. Anthropology has also made important methodological contributions to public health, especially with regard to the use of ethnography for the systematic collection of field data; qualitative methods for the collection and analysis of descriptive, interpretative, and formative data; and the integration of qualitative and quantitative approaches. The ability to translate scientific knowledge into effective practice at the community level is a third area where anthropological approaches have much to offer public health.

Theoretical Contributions

As with anthropology and public health, the basic unit of study in ecology is the population. The *medical ecological* approach links biomedicine with biological and cultural anthropology, resulting in important contributions to understanding health and disease as dynamic, adaptive population-based processes. The ecological model builds on three key assumptions (after McElroy & Townsend 1989:20):

- There are no single causes of disease; rather, disease is ultimately due to a chain of factors related to ecosystem imbalances.
- Health and disease are part of a set of physical, biological, and cultural subsystems that continually affect one another.
- The ecological model provides a framework for the study of health in environmental context but does not specify what factors maintain health within any given local system.

Critical medical anthropology raises important questions about the impact of global political and economic structures and processes on health and disease. It expands the context within which medical anthropology operates and brings it closer to the perspective of public health practice by explicitly seeking to contribute to the creation of global health systems that "serve the people" (Baer, Singer & Susser 1997:33). Critical medical anthropology focuses on health care systems and how they function at multiple levels, including

- The *individual* level of patient experience.
- The *microlevel* of physician-patient relationships.

- The *intermediate* level of local health care systems, particular hospitals and clinics.
- The *macrosocial* level of global political-economic systems.

At each of these levels, the goal is to understand how existing social relations structure the relationships among the participants in the systems. In particular, critical medical anthropologists study the way health care is embedded within dominant relations such as those of class, race, and gender.

The individual level of patient experience has been the focus of *interpretative* anthropology approaches. Kleinman (1997) introduced the cultural interpretative model to provide a means of balancing the externalized, objective view of disease with the subjective experience of illness. Lock and Scheper-Hughes (1990), in turn, developed the concept of *sufferer experience* as an important dimension to the study of health. They developed a metaphorical framework of "the three bodies" to facilitate understanding of the multiple layers of health and illness. The *individual body* constitutes the layer of lived experience, with an explicit rejection of Cartesian mind-body dualism. The social body encompasses the way in which the individual body becomes a kind of canvass upon which nature, society, and culture is represented. The body politic refers to "the regulation, surveillance, and control of bodies (individual and collective) in reproduction and sexuality, work, leisure, and sickness" (Lock and Scheper-Hughes 1900:51). Sickness, in this framework, is understood as a "form of communication" among all three levels, a kind of individual-level expression of social truths and social contradictions. It then follows that, in order to effectively treat the individual expression

of sickness, the role of social and political factors in generating sickness must also be considered.

The microlevel of physician-patient relationships and the intermediate level of local health care systems have been the focus of *clinical anthropology*. Konner (1993) provides a global overview of the many political and economic factors that impact the way doctors are trained and socialized, as well as how they shape the way medical care is enacted in clinics and hospitals. Farmer (1999) examines inequalities in the distribution and outcome of infectious diseases such as tuberculosis, AIDS, Ebola, and malaria as well as the social responses such as quarantine and accusations of sorcery that often are associated with infectious diseases. His particular concern is with the emergence of disease from socially produced phenomena such as poverty and political upheaval, what he describes as the "biological reflections of social fault lines" (1999:5). Farmer critiques simplistic models of disease causality that fail to incorporate dynamic, systematic global factors and, therefore, slight the need for preventive models that target the social determinants of health.

In a similar mode, Singer (1994) proposed a synthesis of two key concepts from the ecological model---that health and disease are ultimately due to a chain of factors and that they are part of a set of interacting subsystems---with the broader global perspective of critical medical anthropology to describe and explain the dynamics of the AIDS pandemic. Singer coined the term *syndemic* to describe the synergistic interaction of social factors, especially local and global inequities, with the epidemiological risk factors for HIV, TB, hepatitis, and substance abuse. The syndemic model provides an important intermediate model that frames the investigation of community level outcomes in terms

of individual behavior, local processes, and higher level processes. The syndemic model raises difficult questions and challenges public health to address the root causes of health disparities. By introducing a multi-level, dynamic epidemiological perspective, it points toward the need to develop and evaluate systems- and community-level interventions that target linked processes.

Methodological Contributions

The application of anthropological methods public health problems has been another important area of contribution. The use of systematic descriptive qualitative methods has proven effective in identifying context-specific factors that contribute to health and disease outcomes. Another important methodological contribution is the use of triangulation, or the systematic application of multiple methods in order to reduce bias in situations where controlled comparison is not feasible. For example, anthropologists typically use natural observation of behavior along with self-report data and descriptions or normative expectations to obtain highly accurate descriptions of events and social relationships.

The development of rapid assessment techniques, variously called rapid appraisal, rapid assessment, and rapid rural appraisal, is a prime example of anthropological contributions to the public health methodological toolkit (Scrimshaw et al. 1991; Beebe 1995). As described by Beebe (1995:42) this is a multidisciplinary team-based approach designed to generate reasonably valid, reliable qualitative results within a short time frame. Rapid assessments can provide the contextual information needed to design in-

depth community-level and community-based public health research and to guide decisions about implementing programs in local settings.

Trostle & Sommerfeld (1996:266-267) describe a number of mutual methodological benefits to be gained from combining anthropological and epidemiological approaches, including:

- Anthropological knowledge of cross-cultural variability can be used to improve the development and measurement of epidemiologic variables.
- Research results can be communicated more effectively to policy-makers and to a public audience when both anthropological and epidemiological descriptions are employed.
- Conceptual and experimental work can be undertaken to determine the best measures of complex cultural and behavioral variables.
- Ethnographic and epidemiological information can be used to design health surveillance systems that return data to communities in more comprehensible forms, creating new meanings for the 'popular epidemiology.'

The authors also provide a useful overview of the way anthropologists and epidemiologists have approached key social and cultural concepts relevant to the study of health and disease including culture change and stress; social stratification; risk vulnerability; behavior; and illness constructs. They also review a number of areas of mutual methodological interest. They propose the label of "cultural epidemiology" to describe "cross-cultural analyses of the distribution and determinants of disease and illness and with unpacking variables (e.g., race, class, religion, time) to illustrate and specify their theoretical context and meaning" (p. 266).

Translating Knowledge Into Action

Anthropological theory and methods have much to offer public health in the area of translating public health knowledge into effective action (Hahn 1999). Contributions range from basic issues of cultural sensitivity to enhance the acceptability and effectiveness of proven practices in clinic settings to the development of policy for the provision complex treatment regimens for intersecting emerging epidemics under conditions of inequity in access to health care. As such, anthropologists are asking questions about the root causes of public health's toughest problems. These problems are not often amenable to study using controlled clinical trials or cross-sectional survey designs. Rather, they are dynamic, systems-level problems that require field-based observation and the use of multiple methods that are both qualitative and quantitative.

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